

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2005/002367

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07K14/54

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | CHAE D-W ET AL: "MUTANT IL-15 PROTEIN EXERTING ANTAGONISTIC EFFECTS ON IL-15 TRIGGERED CELL PROLIFERATION"<br>JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, WILLIAMS AND WILKINS, BALTIMORE, MD, US,<br>vol. 7, no. 9,<br>1 September 1996 (1996-09-01), page 1654,<br>XP002042890<br>ISSN: 1046-6673<br>abstract | 1-43                  |
| A          | US 6 451 308 B1 (MASLINSKI WLODZIMIERZ ET AL) 17 September 2002 (2002-09-17)<br>claims<br>-----<br>-/--  | 1-43                  |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

8 June 2005

Date of mailing of the international search report

05/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Didelon, F

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/002367A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07K14/54

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, MEDLINE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | CHAE D-W ET AL: "MUTANT IL-15 PROTEIN EXERTING ANTAGONISTIC EFFECTS ON IL-15 TRIGGERED CELL PROLIFERATION"<br>JOURNAL OF THE AMERICAN SOCIETY OF NEPHROLOGY, WILLIAMS AND WILKINS, BALTIMORE, MD, US,<br>vol. 7, no. 9,<br>1 September 1996 (1996-09-01), page 1654,<br>XP002042890<br>ISSN: 1046-6673<br>abstract | 1-43                  |
| A          | US 6 451 308 B1 (MASLINSKI WLODZIMIERZ ET AL) 17 September 2002 (2002-09-17)<br>claims<br>-----<br>-/--  | 1-43                  |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

8 June 2005

Date of mailing of the international search report

05/07/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Didelon, F

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2005/002367

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | US 6 177 079 B1 (GRABSTEIN KENNETH H ET AL) 23 January 2001 (2001-01-23)<br>claims   | 1-33                  |
| A          | -----<br>PETTIT D K ET AL: "STRUCTURE-FUNCTION STUDIES OF INTERLEUKIN 15 USING SITE-SPECIFIC MUTAGENESIS, POLYETHYLENE GLYCOL CONJUGATION, AND HOMOLGY MODELING" JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US,<br>vol. 272, no. 4,<br>24 January 1997 (1997-01-24), pages 2312-2318, XP002042891<br>ISSN: 0021-9258<br>cited in the application<br>abstract | 1-43                  |
| A          | -----<br>FEHNIGER T A ET AL: "Interleukin 15: biology and relevance to human disease" BLOOD, W.B.SAUNDERS COMPAGNY, ORLANDO, FL, US,<br>vol. 97, no. 1,<br>1 January 2001 (2001-01-01), pages 14-32, XP002902996<br>ISSN: 0006-4971<br>cited in the application<br>the whole document  | 1-43                  |
| P,X        | -----<br>BERNARD JÉRÔME ET AL: "Identification of an interleukin-15alpha receptor-binding site on human interleukin-15." THE JOURNAL OF BIOLOGICAL CHEMISTRY. UNITED STATES 4 JUN 2004,<br>vol. 279, no. 23,<br>4 June 2004 (2004-06-04), pages 24313-24322, XP002286785<br>ISSN: 0021-9258<br>the whole document<br>-----   | 1-43                  |

## INTERNATIONAL SEARCH REPORT

 International Application No  
 PCT/EP2005/002367

| Patent document<br>cited in search report |    | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|----|---------------------|----------------------------|---------------------|
| US 6451308                                | B1 | 17-09-2002          | US 6001973 A               | 14-12-1999          |
|   |    |                     | US 2003105295 A1           | 05-06-2003          |
|   |    |                     | CA 2252557 A1              | 06-11-1997          |
|   |    |                     | EP 0927254 A1              | 07-07-1999          |
|   |    |                     | JP 2001502521 T            | 27-02-2001          |
|   |    |                     | WO 9741232 A1              | 06-11-1997          |
| US 6177079                                | B1 | 23-01-2001          | US 6168783 B1              | 02-01-2001          |
|   |    |                     | US 5795966 A               | 18-08-1998          |
|   |    |                     | US 2004253587 A1           | 16-12-2004          |
|   |    |                     | AU 708549 B2               | 05-08-1999          |
|   |    |                     | AU 5027596 A               | 11-09-1996          |
|   |    |                     | CA 2210491 A1              | 29-08-1996          |
|   |    |                     | EP 0811065 A1              | 10-12-1997          |
|   |    |                     | FI 973361 A                | 15-10-1997          |
|   |    |                     | JP 11500908 T              | 26-01-1999          |
|   |    |                     | NO 973705 A                | 22-10-1997          |
|   |    |                     | NZ 303843 A                | 29-04-1999          |
|   |    |                     | NZ 334128 A                | 25-08-2000          |
|   |    |                     | WO 9626274 A1              | 29-08-1996          |
|   |    |                     | US 6013480 A               | 11-01-2000          |
|   |    |                     | US 6165466 A               | 26-12-2000          |